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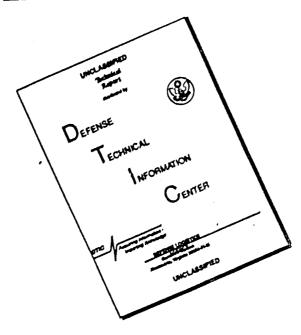
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DEPARTMENT OF THE ARMY

OFFICE OF THE ADJUTANT GENERAL WASHINGTON, D.C. 20310

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20 Ta: No. 1970.

STERCE: Senior Officer Debriefing Report: B. L. D. Finnard. (, II

Hield Force Vietnam Artillery, Period 21 Mar. 1969 to 20

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1. Reference: Ak 1-2. williet, went a utilier beint fine from a (b) dated & Lovember int.

2. Transmitted herewith is the report of Bo L. b. Finnard, empett as alove.

 This report is provided to insure appropriate thenefits are realized from the experiences of the author. The report should be reviewed in accordance with paragraphs 3 and 5. As 1-2; however, it should not be interpreted as the official view of the Department of the Arms, or of and agence of the Department of the Arms.

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DEPARTMENT OF THE ARMY HEADQUARTERS, UNITED STATES ARMY VIETNAM APO SAN FRANCISCO 96375

AVHGC-DST

SUBJECT: Senior Officer Debriefing Report

BG L. D. Kinnard

Assistant Chief of Staff for Force Development Department of the Army Washington, D. C.

- 1. Attached are three copies of the Senior Officer Debriefing Report prepared by BG L. D. Kinnard. The report covers the period 21 May 1969 to 20 November 1969 during which time BG Kinnard served as Commanding General, II Field Force Vietnam Artillery.
- 2. $\mbox{BG Kinnard}$ is recommended as a candidate guest speaker at appropriate service schools.

FOR THE COMMANDER:

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DEPARTMENT OF THE ARMY HEADQUARTERS, II FIELD FORCE VIETNAM ARTILLERY APO San Francisco 96266

AVFB-FAC

20 November 1966

SUBJECT: Senior Officer Debriefing Program (U)

Commanding General United States Army Vietnam ATTN: AVHGC-DST APO 96375

1. References:

- a. AR 1-26
- b. USARV Reg 1-3
- 2. Attached debriefing report is forwarded as required by referenced regulations and reflects my observations while commanding II Field Force Vietnam Artillery from 21 May 1969 to 20 November 1969.

l Incl

L.D. KINNARD

Brigadier General, USA

Commanding

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1. (S) INTRODUCTION:

- a. The following observations were made in late November 1969 and pertain to a six month period as Commanding General, II Field Force Vietnam Artillery from May 21, 1969 to November 20, 1969. It might be useful at the outset to comment briefly on the enemy and friendly situation in the II Field Force area during that period.
- Nature of the war. As a result of FWMAF successes, the main force enemy units have moved into outlying areas. It appears that the enemy's major objectives were to reopen LOC's and to disrupt the FWMAF pacification effort. His tactics were characterized by stand off attacks using mortars and rockets, sapper reconnaissance and selected attacks, and main force attacks in strength along the border. The enemy's ability to avoid contact whenever possible continued to be his greatest asset. On the other hand, his ability to choose the time and place for battle was being attrited. Our successes have enabled us to accelerate Vietnamization of the war. Territorial security forces were being committed to the security of the populated areas and ARVN units were pushing out to interdict enemy movement and to engage him in the outlying areas. FWMAF continued combat and combat support activities with a view towards accelerating pacification, improving the combat effectiveness of RVNAF, and eroding enemy capability in all areas.
- Enemy and Friendly Disposition. During the past six months, the 5th VC Division has moved from its base areas in Long Khanh Province to the northern portion of Phuoc Long Province. The 7th and 9th NVA Divisions remain in the northern tier. Intelligence indicates that the lat NVA Division, with two regiments, has moved into IV CTZ. Sub-regional forces have been seriously attrited and while they remain in the same general areas have been forced to disperse into squad and platoon size groups in order to obtain food and to avoid detection. The assumption of full responsibility for Capital Military District by CG, CMD, and the subsequent phase down of CMAC, permitted the utilization of the 199th LIB and the 3d Bde 82d Abn Div in other areas. The 3d Bde 82d Abn Div was initially employed in southern Binh Duong Province and later returned to the United States. The 199th LIB was deployed to the eastern portion of the III CTZ to operate with the 18th ARVN Div. The 11th ACR moved from the southeastern portion of the III CTZ where it had been cond sting operations with the RTAVF and the 1st ATF to the northern tier where it is presently OPCON of the 1st Cav Div (AM). The ARVN Abn Div with two brigades has also deployed to the northern tier to conduct operations with the 1st Cav Div (AM). The 25th Inf Div with the 3d Bde 9th Inf Div OPCAN continues to operate in the western portion of III CTZ. The 1st 1 f Div remains in the central TAGI. CMD forces consist of one brigade of the ARVN Abn Div, ARVN Rangers, and Regional Forces.

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- Artillery Deployments and Organization. The past six months witnessed the initiation and completion of the first two phases (Keystone Eagle and Keystone Cardinal) of the operation which provides the impetus for US troop withdrawals from the Republic of Vietnam. Initial impact of the force reductions on II Field Force Artillery was the loss of 809 personnel spaces requiring inactivation of one battalion of 105mm howitzers, one artillery group headquarters, and two artillery radar detachments. Additionally, the organic target acquisition battery was drawn down to a strength of 30 personnel, lost its two Metro sections, and is pending attachment to the Force Artillery Headquarters and Headquarters Battery. Loss of one group headquarters necessitated a realignment of Force Artillery assets to preclude over extending the span of control of a single group. Under this realignment the three heavy battalions were assigned to Force Artillery and the two light and four medium battalions were assigned to 23d Artillery Group. The force artillery staff was augmented to meet the added administrative work load, principally, that resulting from assumption of responsibility for personnel administration. The assumption of command and control over three heavy battalions resulted in added demands on the operations section and required some internal reorganization. The charts at TAB A depict II Field Force Artillery organization before and after the initial force reduction.
- e. <u>Artillery Assets Available</u>. During most of the period of this report there were 816 US, RVNAF and FWMAF artillery pieces in action within III CTZ. The normal assignments and distribution by ARVN Division Tactical Area are shown on the chart at TAB B.

2. (C) Credibility of Target Detection Means

- a. During the period 21 May through 21 November, large scale enemy activity has been sporadic and in many areas of III CTZ, non-existent. This reluctance to mass forces and conduct frequent overt military operations has necessitated a resultant increase in the use coand dependence upon, target detection devices to locate and disrupt the enemy and continue to deny him unlimited use of the corps are conduct his operations.
- b. Through extensive use of target detection devices significant lessons have been learned regarding their employment and credibility.
- (1) Ground Surveillance Radars (GSR). The use of GSR has increased significantly by frequent movement of the sets to areas of suspected enemy activity. Previously, static emplacement of these long range personnel detection devices enabled the enemy to fix his locations and plan his operations outside their range or sector of scan. The map

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at TAB C depicts typical static locations of AN/TPS-25A radars in III CTZ. Organic divisional assets are shown in green and those of the Force Artillery in red.

During the past six months, through correlation of intelligence data, highly suspect areas of enemy activity were located and a GSR moved to the nearest allied installation or fire base to further enhance detection of enemy movements for subsequent engagement by artillery, TAC Air, or maneuver forces. Two types of GSR, AN/PPS-5 and the AN/TPS-25, have been used in III CTZ. The offensive employment technique described above has been extremely effective in countering enemy movements but has identified several problem areas. The relatively delicate nature of the equipment requires well trained personnel not only in the operation and maintenance of the set but also in proper displacement techniques. Increased crew proficiency in these areas has greatly reduced down time. To increase effectiveness of the set in areas that are masked from ground level, AB-216/U signal towers have been used to elevate the GSR and have proved to be well suited for this particular role.

- (2) Sensors. The use of sensor devices, seismic, acoustic. magnetic and infra red, has become increasingly significant as a means of providing targeting information for artillery engagement. Although the credibility of one sensor activation is extremely low, the rating increases when sensors are employed in groups utilizing different types. For the most part, sensors cannot discern between types of targets, however, employing different types of sensors and correlating activations with other intelligence data has produced profitable results. Of primary importance for artillery engagement is an accurate means of locating the sensors and well trained operators capable of identifying insignificant activations. Approximately 70% of the sensors are air dropped making accurate location difficult. Several techniques have been used to accurately locate the devices such as the dropping of a smoke grenade with the sensor. The area is photographed immediately after the drop and the photograph is then compared to another photograph taken either before the drop or after the smoke has dissipated. A second technique is to hover a helicopter over the sensor and use radar to obtain a grid location. Other techniques include map spetting and artillery firing.
- valuable as intelligence gathering media, however, they have had little practical application for artillery engagement based soley on information they provide. SLAR, being a doppler radar device, detects only moving targets. By the time target data so obtained can be plotted the target has probe a moved from the area. Red Hase is an infrared device which it can be detecting and providing the general location of heat; the sing objects on the ground such as fires and

vehicle engines. The locations provided are area type locations and are seldom precise enough for targeting. This device cannot discriminate accurately between target types and thus is best used to designate areas which might warrant additional, more detailed investigation. The sniffer device samples the layer of air just above the jungle canopy and is capable of detecting minute traces of gases and airborne compounds common to animal excreta. Air movement and the presence of wild life in the jungle limit the accuracy of location as well as the identity of targets so located. These three devices provide an excellent area detection capability and as such not only indicate the best areas for GSR search and sensor employment but are frequently used to confirm targets detected by these more refined means. No single detection means should be used as the sole source of targeting data where alternate targeting means are available. A great deal of artillery ammunition has been wasted in the past engaging poorly located and ill defined targets detected by only one means. At TAB D is a paper which discusses the relative credibility of available target detection means.

3. (C) Employment of Artillery

- a. Artillery Raids. Command emphasis on mobility and aggressive employment of the force artillery has resulted in a ten fold increase in heavy artillery raids during the period May to November 1969 over employment of such tactics during the previous six months. Employment of heavy artillery in this manner has proven particularly effective against caves, bunkers and caches along enemy routes of egress, denying the enemy vital supplies and shelter enroute to and from sanctuary areas. Occasionally such raids are targeted against enemy forward staging areas located by improved target detection means. The extreme accuracy and devastating firepower have had a decided psychological impact on enemy morale as revealed by agent reports and detained interrogations. This tactic maintains continual pressure on the enemy by effectively denying him safe refuge in areas which were previously relatively secure.
- b. Mobility. Mobility is the key to effective artillery support of maneuver forces in the counterinsurgency environment. Such is even more the case during periods of low level enemy activity when friendly activity is characterized by extensive small unit operations throughout large AC's. To provide effective support for these units, force artillery assets have made 109 major moves during the past six months. Such activity, in addition to short moves involved in conducting artillery raids, has significantly increased the requirement for a mobile configuration within the force artillery since May 1969. The chart at TAB E depicts this increasing trend in green and compares tube milage within the force artillery with that of other major II Field Force commards. This contrast

between force artillery and division artillery movement is explained in large part by an increasing tendency for a maneuver unit, and its direct support artillery, to confine itself to a single area of operations. From a maneuver unit point of view, this is quite important at this stage of the war. As the enemy, to include Viet Cong infrastructure, becomes increasingly difficult to locate it is vitally important to know an area of operations as well or better than the enemy. In effect, then, the force artillery filled fire support gaps and pivoted around the direct support battalions and the maneuver units they support.

- Artillery Assumition Expenditures. During the period May to November 1969, artillery ammunition expenditures increased slightly even though expenditures within II Field Force Artillery dropped during October in response to a corresponding decrease in enemy activity. The chart at TAB F compares expenditures of the force artillery and other artillery with the force to enemy initiated incidents and enemy KIA since January 1969. Of particular significance is the fact that expenditures of the direct support artillery battalions showed a marked increase during October as enemy incidents decreased and friendly search and destroy operations were initiated to maintain pressure on the enemy and locate his base areas. As reflected on the chart at TAE G, expenditures by II FFORCEV Artillery units against acquired targets increased sharply during the same period, while confirmed target engagement, which had increased steadily since May 1969, decreased proportionately. The various target categories depicted are defined on the page behind this chart. Improved target acquisition means, already discussed, are responsible for the increased expenditures against acquired type targets. An extensive study is in progress to develop specific guidance which will provide commanders a basis for further developing expenditure management policy within their commands.
- d. Counter-Sapper Defense of Fire Bases. The greatest current threat to the security of artillery weapons and ammunition located at fire support bases is sapper attack. Proper reveting and bunkering of weapons and ammunition provides excellent survivability against attack by small arms and good protection against the effects of mortar and rocket attack unless a direct hit is scored. The VC/NVA sapper, however, is trained to infiltrate base camp defenses, often under the cover of indirect fire, to engage him walue targets such as artillery pieces and ammunition bunkers with satchel charges and rocket propelled grenade (RPG) fire. Even the best prepared intermal defense sometimes fails to completely protect weapons and ammunition from this type attack. Of the many counter-sapper tactics which have been developed, the west important are those aimed at detecting and decisively engaging the sapper before he is able to penetrate the fire base perimeter. The key to such detection is alert sentinels

and a well planned defensive barrier. Considerable emphasis has been placed on methods of preparing effective defensive barriers and obstacles to impede the sapper. These techniques have been integrated into unit training programs and the training and alertness of sentinels is a matter of strong command concern and emphasis. One of the most effective training vehicles currently being used is a demonstration of sapper tactics and techniques by ex-VC/NVA sapper Kit Carson Scouts. These demonstrations are particularly enlightening and impressive to enlisted personnel who are subject to perimeter and sentinel duty since they tend to relate directly to the situation that they are observing; that is, a sapper infiltrating what they consider to be a well constructed defensive perimeter wire obstacle similar to that which they guard. The devastating firepower and added pimpoint illumination afforded by the 40mm "dusters", quadruple 50 cal. machineguns and xenon searchlights of the automatic weapons battalion have more than once weighed heavily in the defense of a fire base under sapper sttsck. The most important single factor, however, in developing delensive techniques to counter sapper tactics has been the personal interest and attention of commanders, many of whom visited bases likel; to be attacked in order to study the problem first-hand, as well as to encourage the defenders. Their analysis of sapper techniques and the defensive tactics developed therefrom have contributed significantly to our present knowledge and defensibility.

Artillery Accidents and Incidents. One of the most perplexing problems facing artillery commanders in Vietnam is that of bringing the full combat power of his weapons to bear on the enemy, yet selectively avoiding injury and property damage to friendly civilians, among whom the enemy attempts to conceal himself, and injury to friendly troops who operate in the same area as the enemy in search of his location. We have determined the best method of accomplishing this difficult task to be application of surgical precision to all aspects of fire delivery and close study of failures which result in accidents and incidents. We are constantly seeking new ways to implement and focus attention to the standing regulations and directives which provide for safe and accurate delivery of fire. Detailed analysis of accident and incident investigation reports identifies causes and provides an indication of weaknesses which require corrective action in the form of command emphasis and concentrated training programs. During the period May through November 1969 this headquarters' accident and incident prevention program has significantly reduced both accidents and incidents and friendly casualties resultant thereto. As indicated on the chart at TAB H firing mishaps have decreased by 45% and friendly casualties by 81% since June 1969. These rather dramatic results are attributable directly to our having been able to identify the most frequent causes of incidents and arcidents and concentrate

on correcting the conditions which permitted errors to occur. Most common were firing battery errors which accounted for 37% of all firing incidents and fire direction errors which accounted for 37% of all firing incidents have been attributed to an FDC run by a graduate of the in-country FDO school conducted by the force artillary. Thatson and clearance errors were attributable to a number of separate causes and accounted for 28% of all firing incidents. Due to the variety of causes involved in this general area, specific corrective action or training is difficult to prescribe. The chart at TAB I depicts this breakout of incident causes and provides a comparison of incident causes throughout USARV during the same period.

Artillery Unit Evaluations. The CG, II FFORCEV Artillery, instituted a command and control concept in August 1969 which established two evaluation teams, each headed by a senior staff officer, which extended command and control to battery level. One team conducts No-notice Operational Readiness Evaluations (NORE) of firing batteries and the other conducts No-notice Administrative Readiness Evaluations (NARE) of headquarters batteries and service batteries. Since the team visits are unannounced and units are evaluated during conduct of normal duties these evaluations accurately measure the unit's proficiency in the areas evaluated rather than its ability to prepare for an inspection. Additionally, no time is wasted in preparation for the visits. The results of the evaluations have already contributed considerably in a number of areas of concern. The NORE has detected weaknesses in firing battery and fire direction procedures, verifying weak areas detected through analysis of firing incident investigation reports and combat readiness evaluations conducted by battalion and group. NARE results have detected weaknesses in automotive maintenance and battery level administration, both of which indicate a requirement for assistance and command attention. These evaluation results when analyzed and compared with other training indicators will be used to update training programs and serve as an indicator of areas requiring command amphasis and/or staff assistance. These valuable extensions of command and control enable commanders at each echelon to better ensure continual improvement of their units' combat readiness.

4. (U) Artillery Dong Tien

Perhaps the most important single project initiated during the past six months is the artillery Dong Tien (Forward Together) program, a coordinated program of combined US, ARVN and FWMAF mutual support projects. The artillery Dong Tien plan was developed to complement II FFV's and III Corps' Operation Dong Tien. It was conceived through the combined efforts of CG, II FFV Artillery and CO, III Corps Artillery. A combined US/ARVN working committee was

Dong Tien . TOPTSTOROP/ COM = ... and the second of the second o The second of th group, or separate brigade entillory as well as the instralian lst turn, each o. these Free World Force units will be required to develop a mutually coordinated list of artillery battalions. The battalions will then develop a mutually coordinated list of artillery batteries down to ARVN platoon level for mutual association. Association of artillery units is intended to:

- Improve coordination and mutual understanding between ARVN 1) and US/FWMAF artillery units.
 - 2) Improve fire support effectiveness by:
 - Combined planning and coordination of fire support.
 - Standardization of techniques. b)
 - Improving the quality of training. c)
 - Increase artillery firing capabilities.

The combined planning committee developed the following nine mutual support projects which, when completed, will accomplish the program objectives:

- Project 1: Exchange Visits of Battery Personnel
 Project 2: Combined Fire Support Coordination Centers (CFSCC)
 Project 3: Procedures and Coordination Requirements for Planning Combined Fire Support
 - Project 4: Standardized (perational Readiness Evaluation
 - Project 5: Combined Unit Refresher Training Program
 - Project 6: Standardization of Tube Calibration Procedures
 - Project 7: Standardization of Registration Policy
 - Project 8: Combined Use of Meteorological Data Project 9: Combined Survey Control Flan
- a. Project One provides exchange visits of battery personnel under the associate battery program and is a concept to improve more a. understanding, augment existing advisory programs, discuss problem areas and observe battery operations and techniques. Selected officers and NCC's will visit their associate units to become better informed of the problems confronting their counter-parts and render assistance whenever possible. These visits will also provide an excellent means of evaluating the effectiveness of the other mutual support projects. Batteries will collocate whenever possible to facilitate exchange visits among battery personnel.

- b. Project Two establishes combined fire support coordination centers throughout III CTZ which will provide ARVN, US and Free World Force Artillery units a central control facility for coordination of fire support and exchange of tactical information. The most important long range benefit of this project is the organization of a trained functioning fire support coordination facility at district level which will remain as an asset to the province chief long after the immediate requirement for combined coordination has passed. Through employment of these centers, province chiefs will be able to concentrate control of their artillery assets and thus more efficiently exercise their political as well as military authority.
- c. Project Three, procedures and coordination requirements for planning combined fire support, will be developed utilizing the existing CFSCC's in areas where they have already been established. Where these centers do not exist, unit to unit coordination will have to be accomplished in order to develop procedures for combined fire support.
- d. Standardised Operational Readiness Evaluation (ORE), established by Project Four, will be instrumental in identifying areas of weakness in training programs and ensure that standard gunnery procedures are being followed. A standardized ORE checklist will be developed and observers will be exchanged to observe other ORE teams as they perform their duties. The ORE is a particularly effective device for use with the Oriental. By comparing a unit's performance to an established standard rather than that of another unit the threat of embarrassment or loss of "face" is eliminated; an important consideration among Vietnamese.
- e. Combined unit refresher training programs, provided by Project Five, will assist in increasing the proficiency of ARVN artillery. It may be accomplished using either of three methods:
- 1) Small schools at division artillery or battalion level to give refresher training to selected individuals.
- 2) An ARVN or US mobile training team to be trained by a combined instructor group. Once trained, the mobile team would travel from unit to unit (ARVN to ARVN and US to US) giving refresher training.
- 3) On-the-job refresher training can be conducted by US batteries collocated with their associated ARVN batteries.
- f. Until recently, ARVN artillery assets were employed in a purely territorial defense role with little or no requirement

to move or relocate for tactical operations. Artillery was deployed by platoons to key military and population centers, often as a political gesture where the weapons were incorporated into the area defense, providing direct and indirect fire support for both local defense and maneuver units which were limited in their operations to the area determined by the range of the weapons. Units so employed quickly developed a set of standard correction to raw gunnery data based on experience and thus had no practical use for current meteorological data, survey or even grequent registration. After a period of time, fire direction personnel forgot how to compute data employing these corrections and mobility techniques, being no longer important to the mission, were omitted from training programs. The new mobile concept of artillery employment adopted by the Dong Tien plan requires these statically positioned units to move in support of maneuver forces and to deliver accurate fire support under conditions different from those which were standard at their static bases. Long forgotten procedures must be relearned and standardised in order wo improve accuracy and provide the capability to mass fires with other units. Projects Six, Seven, Eight and Nine were designed for these purposes. These projects deal with the technical aspects of artillery and are extremely important to artillery units in a mobile configuration. First, weapons must be calibrated to provide compensation for nonstandard variations due to tube wear. When units are constantly moving in support of maneuver forces they must utilise registration, individual piece, and current meteorological corrections in order to deliver timely, accurate fires. Survey control must be established in order for artillery units to mass their fires. These projects will provide the basis for transition from a mission which has be oriented primarily to static territorial defense to a mobile configuration supporting maneuver elements. A consolidated quarterly progress report will be submitted for units and appropriate milestones will be established against which progress can be measured.

The artillery Dong Tien plan was jointly signed by CG, II FFORCEV and CG, III Corps on 7 Nov 69 and was distributed to the field late in November. A copy of the plan is attached at TAB K for reference.

à closely related but independent project completed involved training CIDG artillerymen. In July of this year, a combined ARVN, II Field Force Artillery and Special Forces program was initiated to provide the initial deployment of Civilian Irregular Defense Group artillery in III Corps Tactical Zone. Two 105mm howitzer plateons were deployed, one each at the Special Forces

Camps at Thien Ngon and Katum. The Lowitzers, provided by the 5th Special Forces Group, were manned by artillerymen from the 25th ARVN Division until CIDG personnel were trained and ready to assure the mission of providing their own direct artillery support. 1: both camps, there is a US liaison team to offer assistance and advice-The CIDG artillerymen began training on 1 September 1969 at the Special Forces CIDG training camp at Trang Sup. CIDG personnel $\epsilon\,t$ Katum and Thien Ngon were carefully screened and 70 of the most qualified were selected to attend the training. The instructor team for the ten week course was provided by the 23d Artillery Group and consisted of three officers and ten enlisted men. The plan of instruction for the course is shown on the chart at TAE L. On 8 November 1969 56 CIDG artillerymen were graduated. The graduates then returned to Katum and Thien Ngon, relieving the ARVN personnel and assuming responsibility for providing their own artillery support. The ARVN artillerymen are being withdrawn in three phases; one-half at each camp were removed on 15 November 1969. Half of the remaining personnel will be removed on 15 December 1969 and the remainder on 15 January 1970. A second class will begin training on 1 December 1969 to provide CIDG personnel to man the howitzers at Duc Hue, Tra Cu and Loc Ninh Special Forces Camps. Forward observer training will be added to the POI for this class.

In another project which exemplifies application of the Dong Tien principle, III Corps Artillery began training an ARVN artillery battery in air mobile movement techniques and jungle operations in September 1969. Its training now completed, this specialized unit will assume the mission of direct support to the 3d Mobile Strike Force, a mission currently being performed by the US jungle battery, a composite battery comprised of three 105mm howitzers from 2d Bn, 13th Arty and three 155mm howitzers from 2d Bn, 13th Arty and three 155mm howitzers from 2d Bn, 12th Arty. The transfer of responsibility from US to ARVN artillery is a four phase operation and will be complete in January 1970. To date, two tubes of 105mm, an FDC and battery headquarters minus have been inserted to the Bu Dop Special Forces Camp, initiating the transfer of responsibility to the ARVN jungle battery. Additional elements will be phased into full service in succeeding Mobile Strike Force operations.

5. (U) Maintenance

Isolation of many firing units and consequent inaccessability of support maintenance facilities poses a continuing problem to the artillery in III CTZ. The resultant delays in obtaining repair parts and difficulty in evacuating equipment coupled with the general lack of sufficient school trained mechanics and maintenance supervisors at both battalion and battery level continue to be a problem. Two programs recently initiated promise to significantly reduce some

of these delays. The Command Critical Items List (CCIL) provides commanders an opportunity to over-ride normal repair parts supply channels to obtain critically needed parts and represents one of the most significant improvements developed lately to expedite delivery of combat essential items to customers in the field. This program also provides senior commanders a direct link with the 1st Logistical Command Commander; a contact which has provided a secondary benefit in the form of vital feed-back on normal repair parts supply procedure failures due to misunderstanding or misinformation at unit level. This feed-back serves to identify such encumbrances to the system and often resulted in expert advice on corrective measure to be taken.

A recent change to II FFCRCEV Artillery policy regarding the lst Logistical Command Repair and Return (R & R) program for M107 and M110 self-propelled weapons has significantly improved the support provided by the programs. Previously, R & R services were performed at the firing battery location. The new policy permits one howitzer per battalion to be taken to the Direct Support Unit (DSU) for R & R service. This change allows maximum utilization of facilities and equipment available at the DSU. The weapon crew accompanies it on R & R and provides manual assistance to maintenance personnel. A secondary benefit of the program is the training which the crew pets while assisting DSU personnel perform the R & R services.

6. (S) Future Aspects

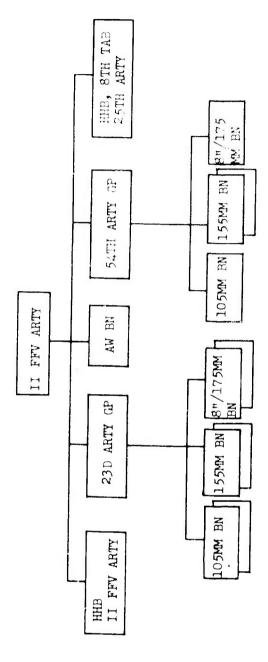
As Vietnamization of the war progresses and further US troop withdrawals are made the requirements for Force Artillery support will remain for the forseeable future. Such combat support services as heavy artillery meteorological data, survey control and target acquisition radar support, which are currently provided largely by II FFORCEV Artillery in III CTZ, will continue to be vital to the combined effort. US personnel trained in these specialties will be required to train ARVN specialists for eventual assumption of responsibility for providing certain of these support categories. Residual elements will continue to require convoy escort and base defense firepower currently provided by the artillery automatic weapons battalion. These assets, which include the track mounted M42, 40mm "duster", the vehicle mounted quadruple .50 cal machinegum and vehicle mounted 23 inch Xenon searchlight, will increase in value as US combat strength decreases and added reliance is placed on their firepower. General support and reinforcing artillery units will have to rely on their own organic self defense forces augmented by Regional and

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Popular Force units for security as they will seldem be collecated with US maneuver elements.

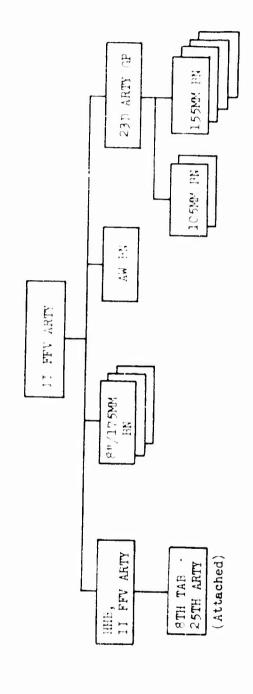
As ARVN artillery units achieve increased mobility they will also face a number of problems which have heretofore been non-existent or of little significance. The Artillery Dong Tien program, previously discussed, addresses several of these problem areas, notably provision of meteorological and survey data which was previously little used by statically positioned ARVN artillery units, and standardized registration policy. Another area of concernis maintenance support of the more sophisticated equipment which ARVN must ultimately be capable of providing. Communications equipment, radars and metro station equipment require the constant attention of highly trained technicians, particularly when it is moved frequently. ARVN does not currently have the technical maintenance base to support such equipment but eventually will have to assume responsibility for certain of these services currently provided by US assets.

PRE KEYSTONE CARDINAL



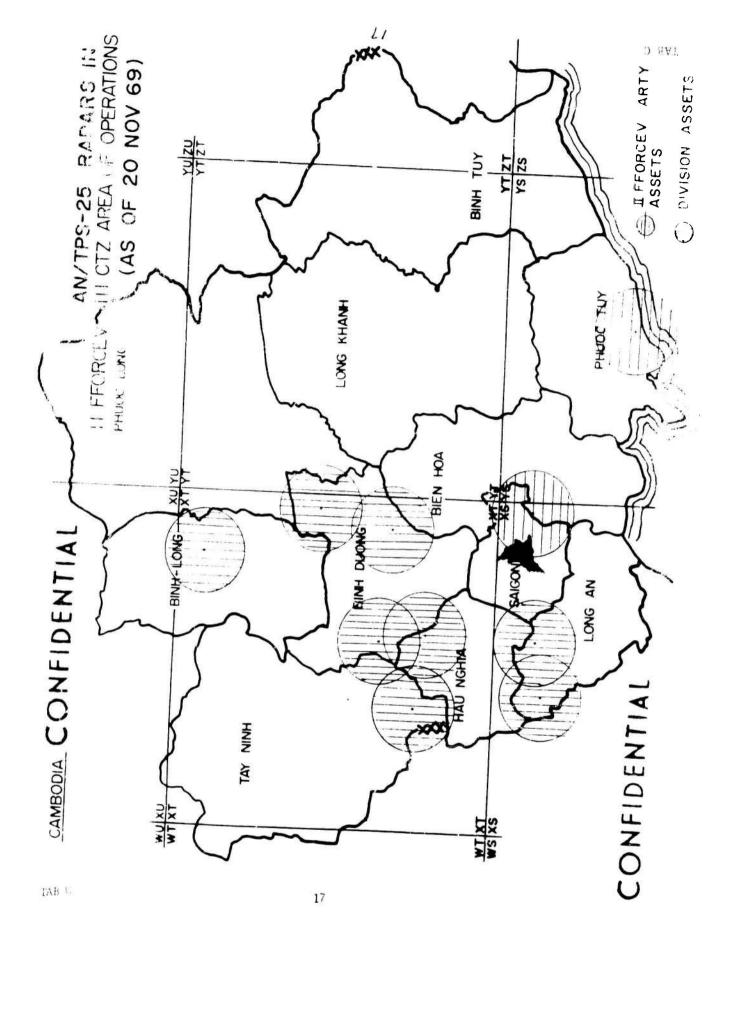
CONFIDENTIAL

POST REYSTONE CARDINAL



CONFIDENTIAL

200	CONFIDE	NTIAL		ARTI LUBIA: WE	रहाँ वर्गास्थ्य <u>ल</u>				
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US LAW/Ede Arty	234	X	α	0	314	118	ø? ₹	ď?	0
II FFORCEV Arty	54	7.8	18	18	168	63	۲,	옶	Ú
RVNAF Arty ARVN Div Arty	177	7)	0	0	1777	갽	엻	c;	Ci
III Corps Arty	8:	54	0	0	7.2	i ei	= # n 3	ć.	77
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CIDG Arty	. 7	J)	0	0	7	4	,	С	O
FWMAF Arty Thai Arty	36	18	0	0	24	O	٠,	54	0
Australian Arty	<u> </u>	0	0	0	18	C	C .	18	0
TOTALS:	568	222	26	18	834	285	1,	230	87



CREDIBILITY AMALTSIS OF TANGET DETECTION DEVICES

I. There has been a steadily increasing interest in the use of detection devices for targeting by artiflery. This has been particularly true during periods of low enemy activity. As contact with the enemy decreases, the employment of artillery on contact type missions is consequently reduced. Thus, other means are bought to employ the firepower available, with the increased interest in these devices, it is important to know what the credibility of the device is, its accuracy, and suitability if the target for engagement by artiflery.

A credibility analysis of five target detection devices (upn!.., bensors, med maze, Shan and bnifter) employed in III STZ, was becaused by II Frombev Artillery.

II. The two primary ground surveillance radars presently employed in III STZ area are the PrS-5 and the Tro-25. It is benerally thought that these radir sightings make excellent targets. However, their value is reduced b, the problems of discrimination, design limitation and experience of operator. The radar discriminates obvious differences in turgets as between venicies and personnel. However, to tell the difference between the movement of animals and the Lovement of personnel is cirricult; or even the difference of trees or brush moving in the wind. These movements have audio and visual presentati ns of a similiar nature. The second problem is the design limitation of the sets. The MrS-5 with a rated .aximum range of book meters has a range error of 1 10 meters and a rated azimuth error of 10 mils. At 5000 meters this computes to a 40x100 meter box sentered around the reported grid wherein the target could be located. the maximum error on the TrS-25 is much larger at the same range. The range gate of 75 meters and the 35 mil beam width gives a pox at 5000 meters of 75x175 meters; which increases to 75x420 meters at the 12,000 meter maximum range.

most of the range and azimuth error and reporting of false targets can be eliminated utilizing only experienced personnel. The audio and visual presentation can be peaked so the probable target area is reduced around the reported grid. rrS-5 operators can reduce the area to a 20x50 meter area and the TrS-25 operator can reduce the area to a 50x100 meter area.

Although the infantry has had problems keeping experienced operators on the rrs-5 set, they are generally well qualified. All of the TFS-25 detachments have been in country over six months and the crews are well trained.

III. The second type of target detection device is the family of Sensors, consisting of Seismic, Acoustic Magnetic and Infra Red Sensors. Nost commanders consider sensor activations as excellent targets; however, there are problem areas: sensors are non-descriptive, there accuracy

TAB D

is dependent on target size and grid location is often erroneous. The Sensors cannot tell the difference between types of targets and will activate from various causes such as animals, air strikes, artillers, thunder storms, and electric storms when using Magnetic Sensors. One of the biggest problems when using Seismic Sensors is the effect of vibrations caused by movement of tree roots. In addition, some sensors will become overly sensitive and activate on almost anything and are called Talkers. The credibility of any one sensor is very low; nowever the credibility rating increases rapicly when the sensors are employed in groups and different types are used in the same field. A good operator can then wend out most of the false activations. Not are activations are reported as sensor Targets. The criteria (number of bensors; number of activations), time and distance factors to designate a target rests with the operator and the buildance he has received. The bensors have a rated detection range of 11 feet to 30 meters depending on the type of sensor. This range increases with different activity. For example, a Seismic Device will detect a man walking at 30 meters but will produce the same indication when it detects a group of personnel at 5, meters or vehicle movement at 300 meters. Thus the accuracy of target location is dependent on the distance ground vibrations extend from the target. The method of Lensor placement also decreases target accuracy. Approximately 70% of the sensors are air delivered which makes an accurate sensor location difficult to obtain. Several techniques are used to more accurately rocate the device such as the dropping of smoke grenade with the sensor and then photographing the area and subsequent restitution of the location. A second technique for optaining a grid is by hovering a helicopter over the sensor and obtaining a grid by radar. Other techniques used to notice the sensor, include map spotting and the firing of artillery.

These devices have an overall good credibility rating and are suitable for engagement by artillery provided that the target is engaged as rapidly as possible before it moves out of the area. Preclearance of sensor fields will decrease the time delay and increase the probability of successfully engaging the target.

IV. Better known as hed haze, Infra hed is another target detection device which provides an indication of possible enample activity in an area. The credibility of this device is only fair as there are critical problems areas; non discrimination, inflight readout is inaccurate, setailed readout is not timely. Since hed haze records a temperature difference. It will pick up and identify as a possible target all forms of heat sources, and cannot distinguish between them. For example, fire support bases, motors on sampans, exposed water, burning tree studies, not rocks, and artitlery rounds up to an mour after burst. Experienced ersonnel are necessary in order to sanitize not spots. Inflight readings may be obtained for possible use; however, the accuracy of these remorted brids will be poor. The operator views a $4\frac{1}{2}$ " x $4\frac{1}{2}$ " screen that interes the terrain. At a normal aircraft run speed of 160 - 200 knots the operator has 3 seconds in which to identify a hot spot and identify it with terrain, and then compare it to a 1:250,000 map to de armine the

grid location. Meanly identifiable terrain for tures may increase the accuracy, but when these features are lacking, an accurate rocation is unlikely.

The location of the hot spot can be determined to a 100 meter accuracy with sufficient time, but this can only be dine after the plane lands and the information is studied. By the time the unit receives the information it is from 2½ to 6 hours old and is no longer valid as a target by itself.

The credibility of this device to obtain a good artillery target is poor and can be post used as an intelligence indicator, to be correlated with other intelligence information.

V. The fourth device under consideration is SLAm (side weaking mirborne dadars). It requires an object with sufficient reflectivity, traveling in excess of 3 km per nour. It will not pickup personnel. The problem with SLAR is that it is non discriminating, not timery, the direction of hoverent is unknown, it is vehicle oriented, and is only an interligence indicator. It cannot distinguish between true tarmets and false tarmets such as rapids on water ways, tree tops blowing in the wind and other aircraft flying below the mission aircraft which operates at 7000 feet. Shake woes not give you timely information. Inflight readings are not timely enough to be of much value. After detection, it takes 3 minutes for the 1:500,000 scale film to appear in the viewer. Thus the target has alr ady traviled 150 meters. The operator then has 15 minutes to search the film, rocate the movement indicator, transfer it to the fixed target indicator and then map spot the location on a 1:250,000 amp. The accuracy of this prot will range from 100 to 300 meters. At this point, coordinates can be passed to the firing unit in the area. By the time a unit is ready to engage the target, which is traveling at 3 km or more per hour, it will be at least 500 meters way. If an inflight readout is not obtained the delay can be 3-6 hours before the information is obtained and the target will have departed the target area. The direction of target movement cannot be determined unless a request is made to make a second pass over the area and get a second pick up of the target. Not knowing the direction it, which the target is moving, a one km circle (or a grid square) becomes the target area. Slan was intended for European type combat environment. Its only value in a counterinsurgency environment is that it does snow movement in an area and is an intelligence indicator, which should be correlated with other information.

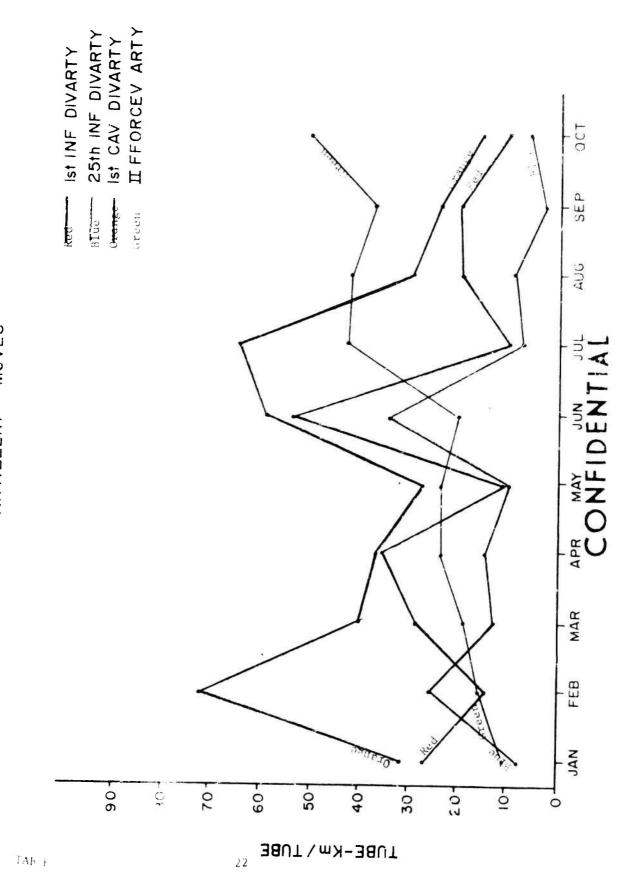
VI. Sniffer is a detection device designed to detect the intensity and change of the type of matter in the air. There are many problems with sniffer as it is non discriminating, lacks reliability and is an intentionate indicator. It cannot distinguish between human activity, vehicle and generator exhausts, monkeys, water buffalo, or the smoke from ourning attumps and grass which is prevalent in the dry season. It is not reliable as to the time the activity took place. It will pick up air strikes from the previous day, give a reading an nour or so after troops have moved

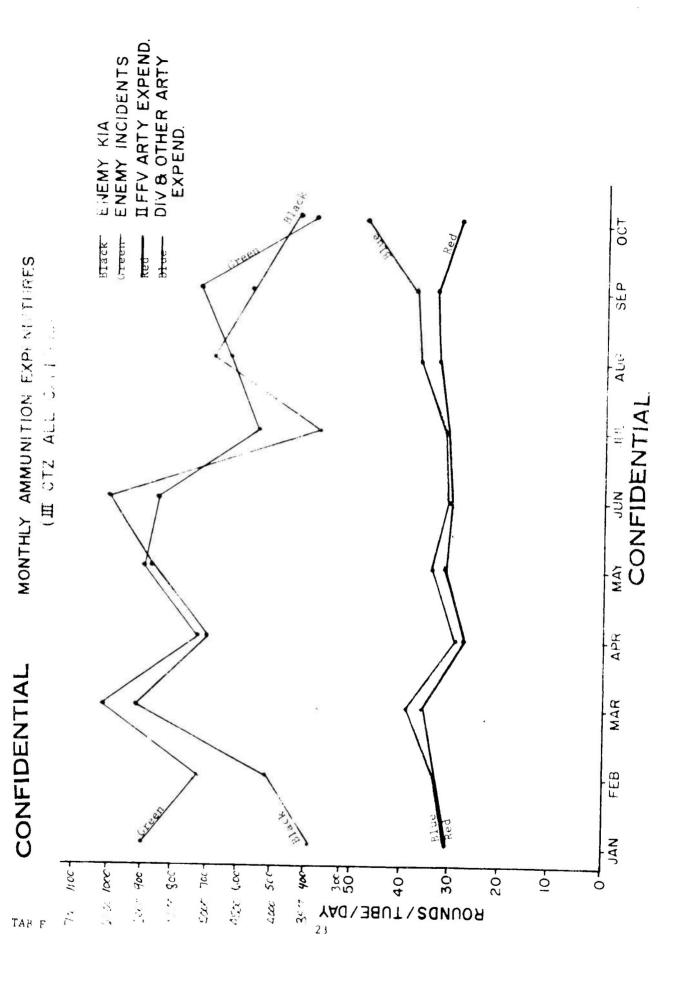
through an area, and report an animal that has been dead for days. The aircraft has to work upwind and cannot make a rerun of an area as the daying will pick up the aircraft exhaust still in the air. Since particles will be carried downwind, and the Sniffer mission is flown in strips 200 - 300 meters apart, the location of the target has an accuracy of 200 - 300 meters. however, since the wind direction is not reported, the way the target grid is determined is by the operator calling 'mark' when a reading is obtained. At this time the pilot of the control aircraft flying overhead map spots the location on a 1:50,00 map. The credibility of Sniffer targets is low as well as providing a poor location for an artillery target. Sniffer is another device that provides information that requires correlation with other intelligence data.

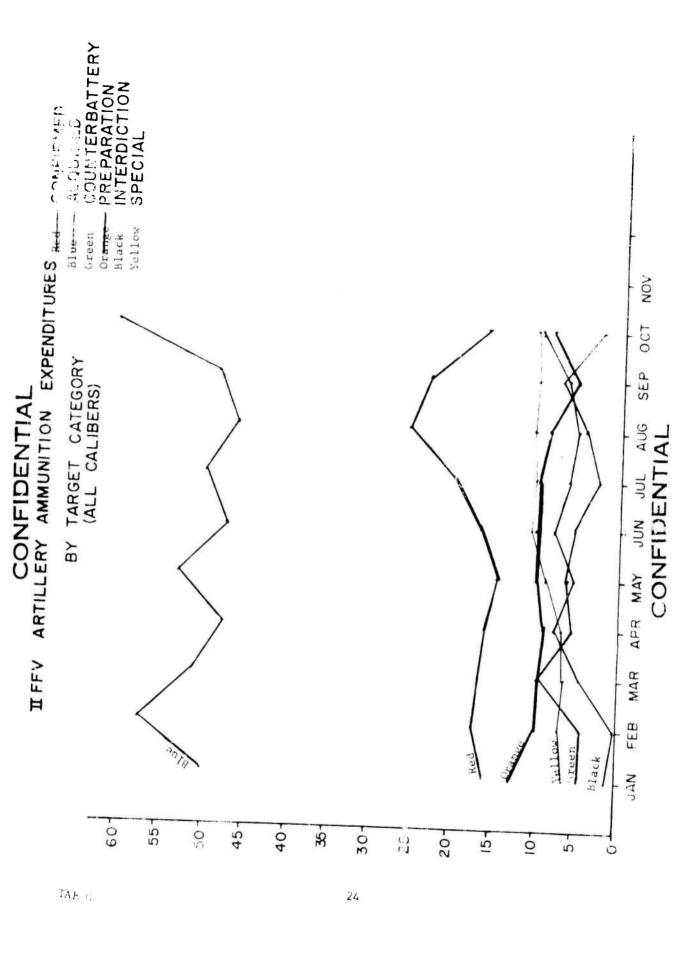
VII. A Summary of the devices discussed shows the GSRs and Sensors provide good artillery target data. However, not excellent as some personnel believe. This is due to the limitation of the equipment and the requirement for experienced operators.

(Red Haze, SIAR and Smiffer) provide poor artillery type targets and can best be used as intelligence indicators. Timely GSR and Sensor readings provide good artillery targets — Red Haze, SIAR, and Smiffer are of doubtful value unless correlated with other intelligence means.

CONFIDENTIAL ARTILLERY MOVES





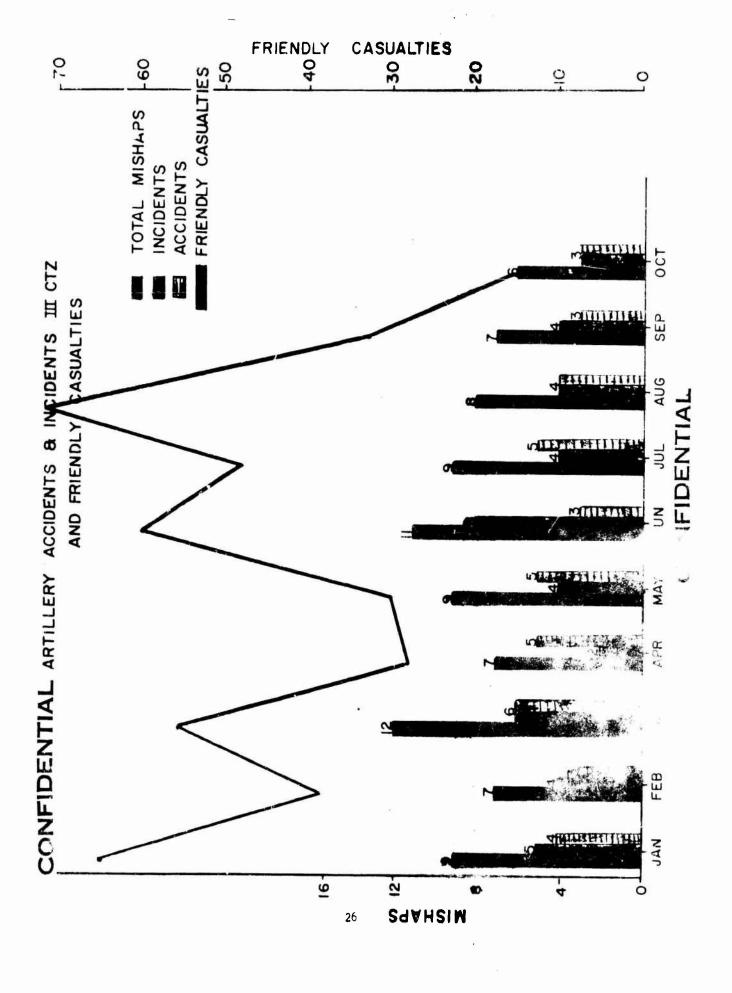


TARGET CATEGORIES DEFINED

- 1. <u>CONFIRMED TARGETS</u>: The enemy location is known, and his presence has been determined by contact with friendly forces or activity seen ty air or ground observers. This category includes missions fired against hard targets such as bunker complexes.
- 2. <u>ACQUIRED TARGETS</u>: Enemy locations based upon SLAR, SPAR's, Red Haze missions, ground surveillance radars, airborne personnel detectors and other detection devices. Targets in this category must be based upon timely reaction and additionally must meet all of the following criteria:
 - a. Detection by one or more of the sensory devices listed.
 - b. Validation by an evaluation of enemy pattern of operations.
 - c. Terrain analysis by competent targeting agencies.
- 3. <u>COUNTERBATTERY</u> <u>TARGETS</u>: Known or suspected locations engaged by friendly artillery immediately before, during or immediately after enemy rocket/mortar/artillery attacks.
- 4. PREPARATION TARGETS: Landing zones, fire support bases and objectives or areas which receive precautionary artillery fire prior to air assualt or ground occupation by friendly forces. This category includes reconnaissance by fire missions and blocking fires.
- 5. INTERDICTION TARGETS: Areas or points which the enemy is likely to use at some unpredicted time. Fire is delivered for the purpose of denying the unrestricted use of an area or point. This category includes targets fired as a result of agent reports that are not timely or lack sufficient reliability to fall in the confirmed category.
- 6. <u>SPECIAL PURPOSE TARGETS</u>: Those targets fired which assist artillery and maneuver elements to improve the technical effectiveness of their operations. This category includes registrations, marking missions, navigation missions, calibrations, adjustment of defensive concentrations and illumination missions.
- 7. $\underline{\text{OTHERS}}$: Those fired for service practice, training, demonstrations, and other categories not included above.
- 8. ARVN SUPPORT TARGETS: Missions and rounds fired in support of ARV. forces are reported in the seven previous categories and also extracted from overall totals and reported in this category.

TAB H

25



CAUSES OF ARTILLERY INCIDENTS



ARTILLERY IONG THE AREA.	UL/FAMAE UNIT	lst Cav Div Arty (JM)	lst Inf Div arty	z/40th Arty	lst Flb Wegt	RIVAR Div Arty	2/4th Arty	25th Inf Div Arty	23d FA Group	II FFV Arty Bns
	TIMO MARY	5th ARVN Div Arty	5th aRVN Div Arty	18th ARVI Div Arty	18th ARVN Div Arty		25th ARVN Div Arty	25th ARVN Div Arty	III Corps Arty Bns	32, 35, 38, 46 Bns

bink Duong Khanh
Binh Tuy
i huoc Tuy
Bien Hoa
Long An
Hau Nghia

Binn bong

HEADQUARTERS
II FIELD FORCE VIETNAM
APO San Francisco 96266

REPUBLIC OF VIETNAM RVNAF HI CORPS AND HI CTZ

II FFORCEV CIRCULAR NUMBER 525-2

7 November 1969

ARTILLERY

DONG TIFN

("FORWARD TOGETHER")

1. <u>PURPOSE</u>: To define the concept and to establish the policies and procedures for coordinating all mutual support projects which increase the capabilities and effectiveness of the combined artillery team within HI CTZ.

2. CONCEPT:

- a. Artillery DONG TIEN is a program requiring close and continuous coordination of mutual support projects through the association of designated ARVN Artillery units and US/FWMAF Artillery units. All projects are continuous in nature and will require periodic review and revision.
- b. The close and continuous coordination of artillery units is intended to:
- (1) Improve coordination and mutual understanding between ARVN and US/FWMAF artillery units.
 - (2) Improve fire support effectiveness by:
 - (a) Combined planning and coordination of fire support.
 - (b) Standardization of techniques.
 - (c) Improving the quality of training.
- (3) Increase the capabilities of ARVN Artillery units through the development of combined on the job training programs.

3. POLICY:

TAB K

II FFORCEV CIRCULAR 525-2

- a. ARVN and US/FWMAF Artillery units must take every opportunity to coordinate and closely cooperate with their counterparts to accomplish each mutual support project.
- b. ARVN and US/FWMAF Artillery Commanders will strive to accomplish the mutual support projects through the establishment of mutual association of Artillery units.
- c. The program of mutual support projects (Artillery DONG TIFN) should be oriented to the attainment of increasing the effectiveness of fire support, developing new capabilities and close coordination of all ARVN and US/FWMAF Artillery units.

4. PROCEDURES:

- a. Artillery DONG TIFN areas and associated units are shown in Appendix A.
- b. Artillery DONG TIEN mutual support projects are shown in Appendix B.
- c. ARVN and US/FWMAF Artillery units will establish an Associate Battery Program and arrange for exchange visits of personnel or collocation of units when appropriate. Emphasis will be placed on the following areas of interest:
 - (1) Firing Battery
 - (2) Storage and Handling of Ammunition
 - (3) Communications
 - (4) Maintenance
- d. Increase artillery fire support effectiveness through the accomplishment of the following objectives:
- (1) In each mutually agreed location, specified ARVN and US/FWMAF Arthliery units will form Combined Fire Support Coordination Centers.

II FFORCEV CIRCULAR 525-2

- (2) Specified units will establish procedures and coordination requirements for planning combined fire support.
- (3) Standardize and conduct operational readiness evaluations for all firing units.
 - (4) Develop a policy for registrations.
- (5) Standardize calibration procedures and develop a plan for the annual calibration of artillery pieces.
- (6) Establish a program for combined unit refresher training in specified subjects.
- e. Increase fire support capabilities through the accomplishment of the following objectives:
 - (1) Utilization of meteorological data.
- (2) Establish survey control to all artillery positions within III Corps area.
- 5. REPORTS: A consolidated quarterly progress report (format provided separately) on the status of Artillery DONG TIEN mutual support projects will be submitted by:
- a. ARVN Division Artillery units and III Corps Artillery Battalions to III Corps Artillery Headquarters.
- b. Artillery Group, Div'sion Artillery, FWMAF Artillery and Separate Brigade Artillery through Lair respective headquarters to H FFV Headquarters, ATTN: Artillery.
- c, Senior Advisor ARVN Division Artillery to Senior Advisor III Corps Artillery.

lst quarterly report will be due at end of 2d quarter FY 1970 and arrive at respective headquarters not later than the 10th day of the month after the end

of the quarter.

6. It should be recognized that ARVN and US/FWMAF Artillery commanders each retain their full command responsibilities. The desired result of the Artillery DONG TIEN Plan is to maximize the capabilities and effectiveness of artillery support available in III CTZ through the coordinated efforts of ARVN and US/FWMAF Artillery units.

man fiver.

JULIAN J. EWELL Lieutenant General, USA Commanding General H FFORCEV DO CAO TRI
Lieutenant General, ARVN
Commanding General
III Corps and III CTZ

freum

2 Appendices

- A. Artillery DONG TIEN Areas and Associated Units.
- B. Artillery DONG TIEN Mutual Support Projects.

DISTRIBUTION:

- 20 CG, II FFV, APO 96266
- 20 CG, I! FFV Arty, APO 96266
- 20 CO, III Corps Arty, Bien Hoa
 - 8 CG, 1st Cav Div (AM), APO 96490
 - 8 CG, 1st Inf Div, APO 96345
 - 8 CG, 25th Inf Div, APO 96225
 - 4 CG, 199th LIB, APO 96279
 - 4 CO, 3d Bde, 9th Inf Div, APO 96371
 - 8 CO, 23d Arty Gp, APO 96289
 - 8 CG, RTAVF, APO 96530
 - 8 CMDR, 1st ATF, AFPO 3

Artillery DONG TIEN Areas and Associated Units

ARVN Units	US/FWMAF Unit	Province
5th ARVN Div Arty	let Cav Div Arty (AM)	Binh Long Phouc Long
5th ARVN Div Arty	lst Inf Div Arty	Binh Duong
18th ARVN Div Arty	2/40th Arty	Long Khanh Binh Tuy
18th ARVN Div Arty	lst Fld Regt RTAVF Div Arty	Phouc Tuy Bien Hoa
25th ARVN Div Arty	2/4th Arty	Long An
25th ARVN Div Arty	25th Inf Div Arty	Hau Nghia Tay Ninh
III Corps Arty Bns (32d, 35th, 38th, 46th Bns)	23d Arty Gp II FFV Arty Bns	

Mutual Support Projects

- 1. Exchange Visits of Battery Personnel (Associate Battery Program).
- 2. Combined Fire Support Coordination Centers (CFSCC).
- 3. Procedures and Coordination Requirements for Planning Combined Fire Support.
- 4. Standardized Operational Readiness Evaluation.
- 5. Combined Unit Refresher Training Program.
- 6. Standardization of Tube Calibration Procedures.
- 7. Standardization of Registration Policy.
- 8. Combined Use of Meteorological Data,
- 9. Combined Survey Control Plan.

Appendi

7 .

Project 1: Exchange Visits of Battery Personnel (Associate Battery Program)

- 1. The primary objective of the Associate Battery Program is to conduct exchange visits of battery personnel in order to improve mutual understanding, augment existing advisory programs, discuss problem areas and observe mattery operations and techniques.
- 2. The intermediate objectives of this project are:
 - a. Istaulish associate battalion list.
 - b. Establish associate battery list.
- c. Conduct exchange visits of battery personnel between AKV. Artillery and US/FWMAF Artillery units.
- 3. Initiation date for this exchange is January 1970.
- 4. Coordination will be effected through the associated unit program as outlined in Appendix A of the Artillery DUNG TIEN Flam. This project will be implemented down to ARVN Artillery platoon level and monitored by succeeding meadquarters. When possible batteries will collocate at fire support of for short periods to facilitate exchange visits of battery personnel.
- 5. Guidance for each level of command:
 - a. III Corps Artillery, III Corps Artillery Advisor, II FFV artillery.
 - (1) Combined Planning Phase.
- (a) Establish an associate unit list for Artillery Group, Division Artillery, Division Artillery Advisor, FWMAF Artillery, Separate Brigade Artillery level.
 - (b) Provide basic guidance to artillery units under their command.
- (2) Execution Phase. Monitor Associate Battery Program and resolve problems in unit association.
 - (3) Evaluation Phase.
- (a) Establish appropriate milestones against which progress can be measured.
- (b) Review and analyze the consolidated quarterly progress report submitted by Artillery Carap, Division Artillery, Division Artillery advisor, FRAF Artillery and Deparate Brigade Artillery.

- each tracter on progress of artillery bold Time. priofing will be rotated retries to the bendquarters.
- (1) as a send changes in program to Cu, ill Corps and Cu, ill FFV after confidention with field units.
 - (e) I itiate approved changes in the program as required.
- t. orthogry orcup, Division Artillery, Division Artillery and constant artillery and separate brigade artillery.
- (2) <u>Execution Phase</u>. Monitor the associate battery representations by the battalions and resolve problems in unit association.
- (3) Evaluation Phase. Evaluate the effectiveness of the associate battery program to achieve its primary objective and recommend improvement.
 - c. Artillery battalion, Artillery Battalion Advisor.
- (1) <u>Gradied Flanning Phase</u>. Establish liaison and develop in absolute postery list down to Artillery platoon level.
 - (:) <u>nyecution Frase</u>. Supervise the associate battery program.
- (4) <u>avaluation Fnase</u>. Evaluate the effectiveness of the ascarlation that they are rest to achieve its primary or jestive and recommend in requires
 - d. .ruli.ery mattery, Articlery Flatoon.
 - (1) Contined Flanning Phase.
 - (a) aptaining plaison with associate battery.
 - (t) Arrange exchange visits of battery personnel.
- (?) <u>execution Phase</u>. Conduct exchange visits of battery per wante entrapis on the Iclowing areas:
 - (); sire battery
 - it; at rage and nandling of Assumition
 - (c) Commications
 - () tance
- (i) <u>Lyout. Use image</u>. Evaluate the effective of the above laboration above laborate its primary object, vehicle its first the second of the contract of the

Project 2: Combined Fire Support Coordination Centers (CFSCC)

- 1. The primary objective of this project is to establish CFSCC's throughout III CTZ.
- 2. The intermediate objectives of this project are:
- a. To designate mutually agreed upon locations of CFSCC's and assign a priority of establishment.
- b. Select units responsible to develop plans and establish and operate GRSGC's.
 - c. Implement approved plans.
- 3. Extensive coordination is required and will be effected through the associated unit program as outlined in Appendix A of the Artillery DONG TIEN Plan. This program will be implemented at Artillery Battalion level and supervised by the next higher headquarters.
- 4. Guidance for each level of command:
 - a. 111 Corps artillery, Ill Corps Artillery Advisor, II FFV Artillery.
 - (1) Combined Planning Phase.
- (a) Select units responsible for establishing CFSCC's and denote required completion date.

Province	Units Responsible	Completion Date
Tay kinh Hau Nghia Binh Long Long Khanh Phouc Tuy Bien Hoa Binh Duong Long An	25th Inf Div Arty 25th Inf Div Arty 6/27th Arty 2/40th Arty 1st Fld Regt 7/8th Arty 23d Arty Gp 2/4th Arty	Oct 1969 Dec 1969 Feb 1970 Jan 1970 TBA TBA Feb 1970 Jul 1969

- (b) Provide basic guidance to all units on the establishment of the GRUCC.
 - (c) Mutual agreement on location of site for CFSCC.
 - (2) Execution Phase. Monitor establishment and operation of CFSCC's.
 - (3) Evaluation Fr. e.

- (a) Establish appropriate milestones against which progress can be measured.
- (b) Review and analyze the consolidated quarterly progress report summitted by Artillery Group, Division Artillery, Division Artillery Advisor, FWMAF Artillery and Separate Brigade Artillery.
- (c) CG, II FFV Artillery and CO, III Corps Artillery will be briefed each quarter on progress of Artillery DUNG TIEN. Briefing will be rotated between the two headquarters.
- (d) Recommend changes in program to CG, III Corps and CG, II FFV after coordination with field units.
 - (e) Initiate approved changes in the program as required.
- b. Artillery Group, Division Artillery, Division Artillery Advisor, FWMAF Artillery, Separate Brigade Artillery.
 - (1) Combined Planning Phase.
- (a) Recommend ARVN and US artillery battalions to be responsible for establishing and operating CFSCC. Battalions recommended should be located near the province capitol and have a relatively static posture.
 - (b) Recommend site for CFSCC. (Consider use of existing TOC).
 - (c) Establish liaison with the Province Senior Advisor.
- (2) Execution Phase. Supervise planning, establishment and operation CFSCC.
- (3) Evaluation Phase. Evaluate the effectiveness of this project to achieve the primary objective and recommend improvements.
 - c. Artillery Battalion, Artillery Battalion Advisor.
 - (1) Combined Planning Phase.
 - (a) Develop plans for establishment of CFSCC.
 - (b) Develop a combined SOP for operation of CFSCC.
 - (2) Execution Phase.
 - (a) Establish and operate CFSCC.
 - (b) Publish a combined SOP.
- (3) Evaluation Phase. Evaluate the effectiveness of the project to achieve the primary objective and recommend improvements.

Project 3: Procedures and Coordination Requirements for Planning Combined Fire Support

- 1. The primary objective of the procedures and coordination requirements for planning combined fire support project is to develop procedures between ARVN and US/FWMAF artillery units for the planning and coordination of combined fire support.
- 2. The intermediate objectives of this project are:
- a. Establishment of initial liaison with ARVN artillery and US/FwMAF artillery.
- b. ARVN artillery and US/FWMAF artillery develop procedures for planning combined fire support.
- (1) Unit to unit coordination will be accomplished in those areas for which a CFSCC has not been established.
- (2) Coordination will be effected through the CFSCC's in those areas for which one has been established.
- 3. Initiation date for this project is January 1970.
- 4. Liaison will be effected through the artillery advisor at division artillery and/or battalion artillery level. This project may be implemented at division artillery and/or battalion artillery level.
- 5. Guidance for each level of command:
 - a. III Corps Artillery, III Corps Artillery Advisor, II FFV Artillery.
 - (1) Combined Planning Phase. Provide basic guidance to units.
- (2) Execution Phase. Monitor procedures and monitor coordination established.
 - (3) Evaluation Phase.
- (a) Establish appropriate milestones against which progress can be measured.
- (b) Review and analyze the consolidated quarterly progress report submitted by Artillery Group, Division Artillery, Division Artillery Advisor, FWMAF Artillery and Separate Brigade Artillery.
- (c) CG, II FFV Artillery and CO, III Corps Artillery will be briefed each quarter on process of Artillery DONG TIEN. Briefing will be rotated between the two headquarters.

- (d) Recommend changes in program to CG, III Corps and CG, II FFV after coordination with field units.
 - (e) Initiate approved changes in the program as required.
- b. Artillery Group, Division Artillery, Division Artillery Advisor, FWMAF Artillery, Separate Brigade Artillery.
 - (1) Combined Planning Phase.
 - (a) Establish liaison with associated unit.
- (b) Develop procedures and coordination for planning combined fire ${\tt support}_{\bullet}$
 - (2) Execution Phase.
- (a) Conduct combined fire support planning when appropriate at this level.
- (b) Provide basic guidance and supervision to battalions on procedures and coordination for planning combined fire support.
- (3) Evaluation Phase. Evaluate the effectiveness of the procedures and coordination requirements for planning combined fire support project to achieve its primary objective and recommend improvements.
 - c. Artillery Battalion, Artillery Battalion Advisor.
 - (1) Combined Planning Phase.
 - (a) Establish liaison with associated unit.
- (b) Develop procedures and coordination for planning combined fire support.
 - (2) Execution Phase. Conduct combined fire support planning.
- (3) Evaluation Phase. Evaluate the effectiveness of the procedures and coordination requirements for planning combined fire support project to achieve its primary objective and recommend improvements.

rroject 4: Standardized Operational Readiness Evaluation (UKE)

- 1. The primary objective of the standardized Operational Readiness Evaluation project is to provide standardized evaluation for ARVN/US artillery units which will identify areas of weakness in training programs and ensure standard gunnery procedures are being followed.
- 2. The intermediate objectives of this project are:
- a. The adoption and publication of a standardized operational readiness evaluation checklist.
- b. On an invitational basis, the exchange of ARVN and US observers on ORr Teams (105mm and 155mm units).
 - c. Teams conduct ORE's.
- 3. Initiation date for this project is February 1970.
- 4. Coordination will be effected through the associated unit program as outlined in Appendix A of the Artillery DONG TIEN Plan. This project will be implemented at Artillery Group, Division Artillery, Division Artillery Advisor, and Separate Brigade Artillery level.
- 5. duidance for each level of command;
 - a. III Corps Artillery, III Corps Artillery Advisor, II FFV Artillery.
 - (1) Combined Planning Phase. Provide basic guidance to units.
 - (2) Execution Phase. Monitor progress of project.
 - (3) Evaluation Phase.
- (a). Establish appropriate milestones against which progress can be measured.
- (b) Review and analyze the consolidated quarterly progress report submitted by Artillery Group, Division Artillery, Division Artillery Advisor, FWMAF Artillery and Separate Brigade Artillery.
- (c) CG, II FFV Artillery and CO, III Corps Artillery will be briefed each quarter on progress of Artillery DONG TIEN. Briefing will be rotated between the two headquarters.
- (d) Recommend changes in program to CG, III Corps and CG, II FFV after coordination with field units.

- (e) Initiate approved changes in the program as required.
- b. Artillery Group, Division Artillery, Division Artillery Advisor, and Separate Brigade Artillery.
 - (1) Combined Planning Phase.
 - (a) Establish liaison with associated unit.
 - (b) Develop a standardized ORE checklist.
 - (2) Execution Phase.
 - (a) Publish a standardized UKE checklist.
- (b) Arrange for the exchange of ARVN and US observers on ORE Teams (105mm and 155mm units).
 - (c) Units will conduct ORE's.
- (3) Evaluation Phase. Evaluate the effectiveness of the standardized ORE project to achieve the primary objective and recommend improvements.
 - c. Artillery Battalion, Artillery Battalion Advisor.
 Non-applicable.

Project 5: Combined Unit Refresher Training Program

- 1. The primary objective of this project is to establish and conduct a unit refresher training program.
- 2. The intermediate objectives of this project are:
 - a. Mutual selection of subjects for combined unit refresher training.
 - b. Selection of method of conducting training.
 - c. Development of a program of instruction.
 - d. Combined ARVN/US/FWMAF observation of classes and training.
- 3. Initiation date for this training is February 1970.
- 4. Coordination will be effected through the associated unit program as outlined in Appendix A of the Artillery DONG TIEN Plan. Three approaches for conducting combined unit refresher training are through:
- a. The development of a small school to give refresher training to a limited number of key personnel or specialists. The classes would be scheduled and conducted as needed.
- b. The combined training of mobile training teams. A combined instructor group would train a mobile training team which would travel from one unit to another. Either US or ARVN mobile training teams could be trained. The mobile training teams would give instruction to only their units.
- c. A US battery conducting on the job training with an ARVN battery when batteries are collocated.

Methods a and b above could be established at Artillery Group, Division Artillery or Battalion Artillery level. Supervision and monitoring would be at the next higher level.

- 5. Guidance for each level of command:
 - a. III Corps Artillery, III Corps Artillery Advisor, II FFV Artillery.
 - (1) Combined Planning Phase.
 - (a) Mutual agreement on unit refresher training program.
 - (b) Provide basic guidance to units.
 - (2) Execution Place. Monitor unit refresher training program.
 - (3) Evaluation . . ase.

- (a) Estallish appropriate milestones against which progress can be measured.
- (b) Review and analyze the consolidated quarterly progress report submitted by Artillery Group, Division Artillery, Division Artillery Advisor, FWMAF Artillery and Separate Brigade Artillery.
- (c) CG, II FFV Artillery and CO, III Corps Artillery will be briefed each quarter on progress of Artillery DONG TIEN. Briefing will be rotated between the two headquarters.
- (d) Recommend changes in program to CG, III Corps and CG, II FFV after coordination with field units.
 - (e) Initiate approved changes in the program as required.
- b. Artillery Group, Division Artillery, Division Artillery Advisor, FWMAF Artillery, Separate Brigade Artillery.
 - (1) Combined Planning Phase .
 - (a) Mutual selection of subjects.
 - (b) Mutual selection of methods of training.
 - (2) Execution Phase.
 - (a) Supervise development of Program of Instruction.
 - (b) Supervise or conduct training.
- (3) Evaluation Phase. Evaluate effectiveness of training through observation, and/or examination.
 - c. Artillery Battalion, Artillery Battalion Advisor.
 - (1) Combined Planning Phase.
 - (a) Mutual selection of subjects.
 - (b) Mutual selection of methods of conducting training.
 - (c) Development of a program of instruction.
 - (2) Execution Phase.
 - (a) Establish training school (if applicable).
 - (b) Establish combined mobile training instructor group (if applicable).

- (c) Conduct refresher training.
- (3) Evaluation Phase.
- (a) Form a combined inspection team to observe training.
- (b) Evaluate the effectiveness of this project to achieve its primary objective and recommend improvements.

Project 6: Standardization of Tube Calibration Procedures.

- 1. The primary objective of this project is to standardize calibration procedures and develop a plan to calibrate all tubes annually.
- 2. The intermediate objectives of this project are:
- a. Publish and disseminate a document explaining the necessity of calibration.
 - b. Develop plan for conducting calibrations annually.
 - c. Execute calibration plan.
- 3. Initiation date for this project is January 1970.
- 4. Coordination will be effected through the associated unit program as outlined in Appendix A of the Artillery DONG TIEN Plan. In order to efficiently use the assistance of ordnance, all ARVN units which cannot be incorporated into a US unit's calibration schedule, will be scheduled for calibration in a separate 3C day schedule. This schedule will be prepared by the associate unit, coordinated through II FFV Artillery, who in turn will coordinate the use of ordnance assistance within III CTZ.
- 5. Guidance for each level of command:
 - a. III Corps Artillery, III Corps Artillery Advisor, II FFV Artillery.
 - (1) Combined Planning Phase. Provide basic guidance to units.
 - (2) Execution Phase.
- (a) Publish and disseminate a document explaining necessity of calibration.
 - (b) Monitor plan established.
 - (c) Coordinate use of required ordnance assistance.
 - (3) Evaluation Phase.
- (a) Establish appropriate milestones against which progress can be messured.
- Review and analyze the consolidated quarterly progress report submitted by Artillery Group, Division Artillery, Division Artillery Advisor. FWMAF Artillery and Separate Brigade Artillery.

- (c) CG, II FFV Artillery and CO, III Corps Artillery will be briefed each quarter on progress of Artillery DONG TIEN. Briefing will be rotated between the two headquarters.
- (d) Recommend changes in program to CG, III Corps and CG, II FFV after coordination with field units.
 - (e) Initiate approved changes in the program as required.
- b. Artillery Group, Division Artillery, Division Artillery Advisor, RTAVF Artillery, Separate Brigade Artillery.
 - (1) Combined Planning Phase.
- (a) Establish coordination with associated unit and develop a plan to incorporate the calibration of ARVN artillery units into the US calibration schedule. ARVN units will be calibrated annually.
- (b) Develop a separate calibration schedule, using no more than a 3C day period, to calibrate all ARVN artillery units which can not be incorporated into the US unit's calibration schedule.
 - (2) Execution Phase.
 - (a) Implement the calibration plan.
- (b) Coordinate separate calibration schedule with II FFV Artillery for ordnance assistance,
- (3) Evaluation Phase. Evaluate the effectiveness of the project to achieve the primary objective and recommend improvements.
 - c. Artillery Battalion, Artillery Battalion Advisor.
 - (1) Combined Planning Phase. Non-applicable.
 - (2) Execution Phase.
 - (a) Aid in the implementation of the program.
 - (b) Provide input as required by next higher headquarters.
 - (3) Evaluation Phase. Evaluate use of calibration data.

Project 7: Standardization of Registration Policy

- 1. The primary objective of this project is to establish a standardized policy for conducting registrations.
- 2. The intermediate objectives of this project are:
- a. Publish and disseminate a paper explaining the necessity for conducting registrations and when they should be conducted.
- b. Develop a procedure of checks to ensure that the registration policy is being followed by all units.
- 3. Initiation date for this project is December 1969.
- 4. Coordination will be effected through the associated unit program as outlined in Appendix A of the Artillery DONG TIEN Plan. This project will be implemented at III Corps Artillery, III Corps artillery Advisor, II FFV Artillery Level.
- 5. Guidance for each level of command;
 - a. III Corps Artillery, III Corps Artillery Advisor, II FFV Artillery.
- (1) <u>Combined Planning Phase</u>. Develop a paper explaining the necessity for conducting registrations and when they should be conducted.
- (2) Execution Phase. Publish and disseminate a paper explaining the necessity for conducting registrations and when they should be conducted.
 - (3) Evaluation Phase.
- (a) Establish appropriate milestones against which progress can be measured.
- (b) Review and analyze the consolidated quarterly progress report submitted by Artillery Group, Division Artillery, Division Artillery Advisor, FWMAF Artillery and Separate Brigade Artillery.
- (c) CG, II FFV Artillery and CO, III Corps Artillery will be briefed each quarter on progress of Artillery DONG TIEN. Briefing will be retated between the two headquarters.
- (a) Recommend changes in program to CG, III Corps and CG, II FFV
 - (a) Initiate approved changes in the program as required.

- b. Artillery Group, Division Artillery, Division Artillery Advisor, FWMAF Artillery and Separate Brigade Artillery.
 - (1) Combined Planning Phase. Provide basic guidance to units.
- (2) Execution Phase. Supervise the implementation of the registration policy established by higher headquarters.
- (3) Evaluation Phasa. Evaluate the effectiveness of this project to achieve the primary objective and recommend improvements.
 - c. Artillery Battalion, Artillery Battalion Advisor.
- (1) <u>Combined Planning Phase</u>. Develop a system of checks to ensure the registration policy is being followed by all batteries under their command.
 - (2) Execution Phase.
 - (a) Implement the registration policy established by higher headquarters.
- (b) Check to ensure the registration policy is being followed by all batteries under their command.
- (3) Evaluation Phase. Evaluate the effectiveness of this project to achieve the primary objective and recommend improvements.

Project 8: Combined Use of Meteorological Data

- 1. The primary objective of this project is to provide meteorological data and assistance to ARVN in developing the capability to produce meteorological data.
- 2. The intermediate objectives of this project are:
- a. Disseminate to ARVN artillery units the advantages of using meteorological data.
- b. Disseminate meteorological messages to all artillery units in III CTZ.
 - c. Train ARVN personnel to operate meteorological stations.
- 3. Initiation date for this training is December 1969.
- 4. This project will be accomplished down to battalion level.
- 5. Juidance for each level of command:
 - a. III Corps Artillery, III Corps artillery Advisor, II FFV artillery.
 - (1) Combined Planning Phase.
- (a) Develop a paper explaining the advantages of using meteorological data.
- (b) Develop a plan to disseminate meteorological data to all artillery units within III CTZ.
- (c) Develop plans for establishing a 7 day program of instruction to teach selected $A\pi VV$ personnel the procedures required to produce a visual type meteorological message.

(2) Execution Phase.

- (a) Publish and disseminate to ARVN artillery units a paper on the advantages of using meteorological data.
- (b) Disseminate meteorological data to all artillery units within III JTZ.
 - Conduct a visual ty; e meteorological school.
- (a) Placement of selected Astro personnel with US meteorological stations to receive on the job training.

- (3) Evaluation Phase.
- (a) Establish appropriate milestones against which progress can be measured.
- (b) Review and analyze the consolidated quarterly progress report submitted by Artillery Group, Division Artillery, Division Artillery Advisor, FWMAF Artillery and Separate Brigade Artillery.
- (c) CG, II FFV Artillery and CO, III Corps Artillery will be briefed each quarter on progress of Artil.ery DONG TIEN. Briefing will be rotated between the two headquarters.
- (d) Recommend changes in program to CG, III Corps and CG, II FFV after coordination with field units.
 - (e) Initiate approved changes in the program as recuired.
- b. Artillery Group, Division Artillery, Division Artillery Advisor, and Separate Brigade Artillery.
 - (1) Combined Planning Phase. Provide basic guidance to units.
 - (2) Execution Phase.
- (a) Disseminate meteorological data to artillery units within the valid meteorological area of coverage.
 - (b) Conduct on the job training for selected AkVN personnel.
- (3) Evaluation Phase. Evaluate the effectiveness of the project to achieve the primary objective and recommend improvements.
 - c. Artillery Battalions, Artillery Battalion Advisor.
 - (1) Combined Planning Phase. Non-applicable.
 - (2) Execution Phase.
- (a) Meteorological sections disseminate data to artillery units within the valid meteorological area of coverage.
 - (b) Conduct on the job training for selected Aiv personnel.
- (3) Evaluation Phase. Evaluate the effectiveness of this project to achieve the primary objective and recommend improvements.

Project 9: Combined Survey Control Plan

- 1. The primary objective of the combined Survey Control Plan is to extend survey control to all artillery units in III Corps Tactical Zone through a combined ARVN, US and FWMAF effort.
- 2. The intermediate objectives of this project are:
- a. Locate and identify existing survey control points within Division Tactical Areas and Areas of Operation.
- b. Develop a plan to extend survey control to artillery units throughout III CTZ.
 - c. Execute survey plan.
 - d. Train AkVN survey teams by on the job training.
- 3. Establishment of survey control throughout III CTZ will be a continuous combined effort.
- 4. Coordination will be effected through the associated unit program as outlined in Appendix A of the Artillery DONG TIEN Plan. This project will be accomplished down to Battalion level.
- 5. Guidance for each level of command.
 - a. III Corps Artillery, III Corps Artillery Advisor, II FFV Artillery.
 - (1) Combined Planning Phase.
- (a) Develop a plan to extend survey control to artillery units throughout the III CTZ.
- (b) Provide basic guidance to units for implementation of the survey plan.
 - (2) Execution Phase. Monitor execution of survey plan.
 - (3) Evaluation Phase.
- (a) Establish appropriate milestones against which progress car. be measured.
- (b) Review and analyze the consolidated quarterly progress report submitted by artillery Group, Division Artillery, Division artillery Advisor, FAMAF Artillery and Separate Brigade Artillery.

- (c) CG, II FFV Artillery and CO, III Corps artillery will be briefed each quarter on progress of Artillery DONG TIEN. Briefing will be rotated between the two headquarters.
- (d) Recommend changes in program to CG, III Corps and CG, II FFV after coordination with field units.
 - (e) Initiate approved changes in the program as required.
- b. Artillery Group, Division Artillery, Division Artillery Advisor, FWAAF Artillery and Separate Brigade Artillery.
- (1) <u>Combined Planning Phase</u>. Locate and identify existing Survey Control Points within Division Tactical Areas and Areas of Operation.
 - (2) Execution Phase.
 - (a) Execute survey plan.
 - (b) Train ARVN survey teams through on the job training.
- (3) Evaluation Phase. Evaluate the effectiveness of this program to accieve the primary objective and recommend improvements.
 - c. Artillery Battalion, Artillery Battalion Advisor.
 - (1) Combined Planning Phase. Non-applicable.
 - (2) Execution Phase. Assist parent headquarters as required.
 - (3) Evaluation Phase. Non-applicable.

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